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ABSTRACT

This paper introduces an alternative to the conventional "method-oriented" approach to evaluation of interventions with people having profound/multiple intellectual disabilities (PMPID). The proposed approach uses the principles of theory-driven evaluation, based on a program theory which specifies what must be done to achieve the desired goals, what additional impacts may be anticipated, and how these goals and impacts are to be generated. The paper proposes a two-fold theory of an educational program for individuals with PMPID: that these individuals are capable of establishing meaningful relationships and that their care requires full consideration of their educational needs. The evaluation model is applied to a typical program for individuals with PMPID with the identification of concrete goals and the use of questionnaires, observations, interviews, and document analysis to evaluate four programmatic levels: information, training, support, and written directions. Application of these principles to three evaluation studies is briefly reported. (Contains 23 references.) (DB)

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PROGRAMME IMPROVEMENT FOR INDIVIDUALS WITH PROFOUND MULTIPLE DISABILITIES FROM THE THEORY DRIVEN PERSPECTIVE

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Abstract
Most evaluation studies on programme improvement in social and health care based on method oriented evaluation of interventions. These interventions consist of implementing a programme and assessing the short-term effectiveness. We discuss the shortcomings of this sort of evaluation research. This article introduces an alternative way of conducting research using the principles of theory driven evaluation and presents a model of an intervention based on theory driven programme evaluation. The feasibility of the model is demonstrated using some evaluation results of interventions in the care for individuals with profound motor and profound intellectual disabilities.

Short title: Programme improvement

Keywords: theory driven evaluation
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1 Introduction

Evaluation studies on programme improvement in social and health care often are based on method oriented evaluation of interventions (Bickman, 1989; Chen, 1990; Lipsey, 1989, 1990; Patton, 1990). These interventions concern an implementation of a programme or method and assessment of the effectiveness in the short run. In these so-called 'outcome studies', no attention is given to environmental and other restrictions or constraints on effectiveness. If the aim of an intervention is to improve programme functioning, then such outcome evaluations will be inadequate. The effectiveness of these interventions can easily become a point of conflict, with stakeholders (careworkers, parents, researchers) disagreeing about the one and only correct interpretation of the intervention results. Even before an intervention has started, stakeholders can also easily disagree about the conceptualization of the problem, about the proposed way of gathering data or data analysis.

In this article I will present a programme theory in accordance with the principles of theory driven evaluations. This theory provides guidelines for identifying the most important issues in an evaluation. As far as the care for individuals with profound motor and profound intellectual disabilities (PMPID) is concerned my theoretical point of view is from the educational perspective. Based on this programme theory, I will construct a model of an evaluation in the care system for these individuals. The aim of the intervention is to improve programme functioning in terms of reduced educational problems. The effectiveness of this intervention is discussed using some results from evaluations of interventions in the care for individuals with PMPID.

2 Method oriented research

Problems and questions in social and health care programmes often have not disappeared after interventions directed at the care system, notwithstanding excellent ideas on the programme or theories from other areas. Programme staff, management or parents may start to doubt the success of these interventions. Some may feel that the programme is no longer functioning optimally or is actually failing. Others may take up old routines again or perhaps the changes that were achieved simply fade away. In such cases, the effectiveness of the intervention becomes a point of conflict especially with respect to the long run. This problem may be the result of a so-called 'method-oriented' evaluation of the intervention. In a method oriented study evaluators focus on only one single research method or model. Most of these researchers focus on the experimental research paradigm (Lipsey, 1985) using only quantitative methods. Others focus on the naturalistic research paradigm and its qualitative methods, such as Guba & Lincoln (1989). An experiment can be an adequate research tool if the aim of research is to demonstrate whether or not an intervention is effective. However, such experiments have little real use because they neglect questions such as why an intervention is effective, or what environmental conditions are needed to achieve an effective intervention. In the experimental research paradigm interpretation problems concerning programme effectiveness are caused by methodological issues, such as randomization and sampling procedures or psychometric quality of instruments. Most evaluation studies are based on the framework provided by this paradigm (Lipsey, 1985). Similarly, in naturalistic approaches (for example Guba & Lincoln, 1989) interpretation problems concerning programme effectiveness are caused by methodological issues such as shortcomings in generating valid and generalizable information, evaluators' biases or a compromise between evaluation standards and criteria (Chen, 1988; Williams, 1986). Generally speaking, naturalistic approaches only use qualitative methods and reject any merits of experimental or quantitative methods. This kind of research also cannot demonstrate why or when an intervention is effective and how programme functioning can be improved.

If the aim of an evaluation is to improve programme functioning (including increased effectiveness) these so-called 'method oriented' approaches are inadequate. The overemphasis on methodological issues of both the experimental and the naturalistic approaches tends to narrow their focus.

In previous research, using the method-oriented approach, evaluators tried to improve the programme for individuals with profound intellectual disabilities (PID) and PMPID but had limited success. For example, in one Dutch study on whether increasing the number of careworkers in an institute has a positive effect on the development of functional abilities of residents with PMPID, researchers were unable to confirm their hypothesis (WVC, 1987). This study showed that more time spent attending to the residents does not result in increased progress in functional abilities. Another Dutch study (Seys, 1987) showed that increasing the number of careworkers does not guarantee an improvement in communication between individuals with PID and their care providers: a qualitative and quantitative decrease in resident-directed behaviour was found when the number of careworkers was increased. A third research project in the Netherlands regarding the care for individuals with PMPID (Van Andel, 1991) was directed at reducing careworkers' workload by limiting the amount of time spent conferring with specialists such as physical therapists, speech therapists and doctors. Careworkers were satisfied with the resulting reduction in their workload. However, they also reported a lack of interdisciplinary contact and uncertainty in their daily interactions with the residents. It seems obvious that evaluations based on method-oriented designs cannot reduce or prevent problems and questions being raised regarding the care for individuals with PID or PMPID.
All these studies addressed symptoms of low organizational effectiveness and didn't dig down to the root of the problem. These studies lack a theoretical dimension in the analysis, the intervention and the evaluation.

3 Theory driven evaluations

In theory driven evaluations a programme theory is involved. A programme theory specifies what must be done to achieve the desired goals, what additional impacts may also be anticipated, and how these goals and impacts are to be generated (Chen, 1990). A programme theory provides guidelines for identifying the most important issues in an evaluation, for determining what method or methods are most applicable for addressing these issues, and provides suggestions about how to apply the preferred method or methods to deal with these issues.
If the aim of research is to improve programme functioning or programme effectiveness the evaluator has to consider both values and theories in order to be able to choose the most important issues and to determine what kind of methods will provide the most relevant information for programme improvement. An assessable intervention programme contains a programme theory or programme logic, that specifies the relationships between programme goals, treatment and implementation-environment. There should also be a clear decision-making process concerning the setting of goals, programme planning, programme execution and use of evaluation results. The evaluation of an intervention, that is designed and carried out in this way, may be referred to as theory driven programme evaluation (Chen & Rossi, 1984; Chen, 1990). According to this point of view, lack of programme effectiveness or dubious results may be due to inadequate theory underlying the programme or to poor programme execution. In the case of an inadequate theory, theory driven programme evaluators refer to 'theory failure'. Poor programme execution is referred to as 'programme failure'. Theory failures and programme failures are the 'core business' of theory driven programme evaluations. These type of concerns are the fundamental force behind theory driven evaluations.

4 Design and conducting a theory driven evaluation

4.1 Programme theory outline

An important but often neglected programme theory in care programmes for individuals with PMPID is

educational theory (Nakken, 1997; Meininger en Reinders, 1997). The use of an educational theory to select one problem at a time and to achieve consensus among stakeholders about the desired results and programme effectiveness has been underestimated. An educational theory should actually be the foundation of an intervention directed at the care programme. The most important elements of an intervention aimed at programme improvement often concern the conceptualization of the problem, the goalsetting, the implementation strategy or the interpretation of effectiveness. With an educational theory, consensus can be reached about these issues. In this way, disagreements about programme improvement can be avoided both prior to as well as after an intervention, especially in the long run.

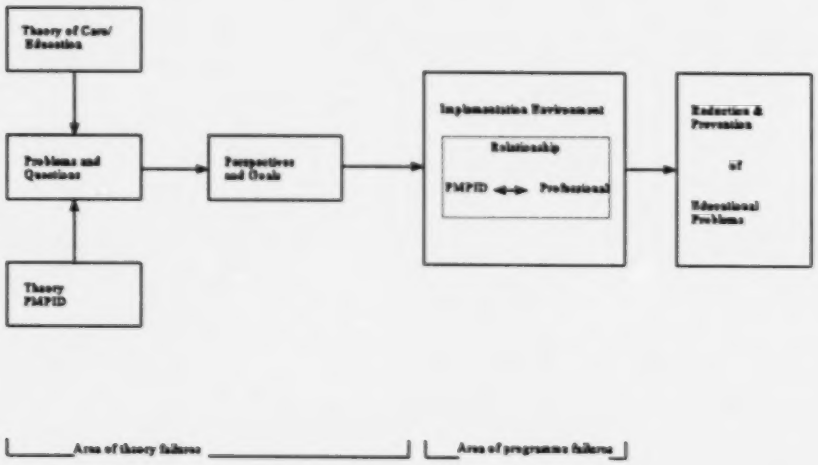
Our theoretical premises of an educational programme for individuals with PMPID are twofold. Our first concept is that individuals with PMPID are capable of establishing meaningful relationships. These residents form a heterogeneous and complex group of individuals, who all demonstrate a wide range of ability and talent in their involvements with one another (Gleason, 1989). Continuous evaluation of one's relationships with the residents provides knowledge about results and expectations of careworkers' efforts and incorporates this in a comprehensive understanding of the care process. These evaluations provide the organization with continuity of care and subject-directedness. Continuity comprises more than an organizational feature or the expertise of careworkers and consistency in approach. Knowledge about results and processes may in turn both motivate and increase personal effectiveness (Bandura, 1975), professional competence and job satisfaction (Van Wijck, 1993). To realize subject-directedness. special educators should be trained into thinking about educational perspectives and goals for these individuals.To realize continuity, the organizational capacity should be trained to systematically evaluate educational programmes.

Secondly, we are convinced that the care for individuals with PMPID should be planned and evaluated so as to give full consideration to their educational needs (Vlaskamp, 1993).

Systematic extension of our knowledge and the nature of our involvement in the lives of individuals with PMPID may reduce or prevent educational problems as a consequence of programme improvement.

The above-mentioned educational theory is depicted schematically in figure 1.

Figure 1 Programme-theory outline for programme improvement in terms of education



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If a conflict about the interpretation of programme effectiveness may arise it can be caused by a theory failure or by a programme failure. A theory failure concerning education is involved if consensus between stakeholders on underlying theories with respect to both the conceptualization of the problem and programme goals lacks. Low evaluability (Wholey, 1987) of the programme may result. For example, you make an educational theory failure if you believe that individuals with PMPID cannot communicate effectively, or that "not understanding" is characteristic of a resident's disabilities.
A programme failure concerning implementation is involved if incongruency exists between planned and actual implementation-environment. This incongruency can be due to both shortcomings in professional competence and evaluation. Low evaluation capacity (Love, 1991) of the implementing organization may result. For example you make a programme failure if careworkers are incapable of communicating with PMPID residents. Another programme failure arises if careworkers are insufficiently motivated or are unfamiliair with systematic evaluation.
By avoiding these failures and reformulation of theories and programmes the programme functioning improves, the effectiveness increases and educational problems may be reduced or prevented.

4.2 Operational schema for programme evaluation

The main goal of our intervention is programme improvement and the desired final effect of the intervention is reduction or prevention of educational problems. These 'outcomes' are mediated by more concrete or intermediate goals. These concrete goals of our intervention are related to the theory of PMPID as follows:

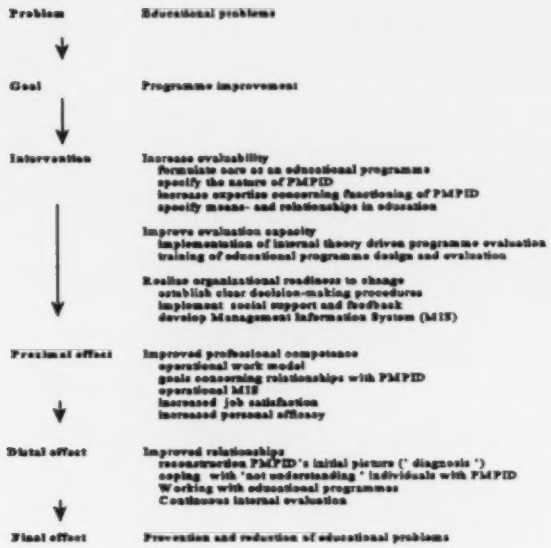
* to achieve consensus between stakeholders both on theoretical issues underlying the programme for individuals with PMPID and the desired outcomes
* to specify the nature of PMPID and the functioning ofindividuals with PMPID
* to achieve consensus on conceptualization of the problems the perspectives and the goals
* to improve relationships between careworkers and residents with PMPID

Concrete goals related to the theory of care/education are:

* to formulate care as an educational programme
* to improve the self-evaluation capacity of the implementation environment (the implementing organization)
* to increase professional competence of the careworkers, implementing a systematic work model within an educational framework (Van Wijck, 1993; Vlaskamp, 1993; Nakken 1993). I will characterize this model as internal theory driven programme evaluation
* to realize both organizational readiness to change and to accept programme evaluation in the implementation environment

This operational model is depicted schematically in figure 2.
The proposed intervention programme is implemented at four levels of instruction: information, training, support and written directions. We use questionnaires, observations, interviews and analysis of documents to establish the nature and effectiveness of the educational care given before and after the intervention.

Figure 2 Operational outline of a theory-driven programme evaluation to achieve programme improvement for individuals with PMPID



5 Some results of theory-driven programme evaluations

The outlines presented above in figure 1 and figure 2 to achieve programme improvement have been implemented by us in several intervention studies concerning programme improvement for individuals with PMPID (Nakken, 1993; Vlaskamp, 1993; Van Wijck, 1993). In our first study primary attention was given with respect to bio-medical care issues, but careworkers reported deep uncertainty about their communicative efficacy and evaluation capacity. This programme failure caused a serious educational problem. Programme improvement was directed at careworkers' professional competence. After a four-month intervention their capacity for working systematically in an educational context increased and their communicative skills improved. Educational problems such as 'not understanding individuals with PMPID' were reduced, job satisfaction increased and problems concerning educational perspectives and goals were solved to a large extent.

In our second evaluation study (Van Wijck et al, 1993), programme succes was low because of an educational problem on a theoretical level. Individuals with PMPID had to participate in a day care activity project, according to a programme which was based on the principles of developmental psychology. The programme was directed at achieving developmental 'mile-stones'. Programme improvement was directed

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at repairing and preventing this theory failure. An intervention was carried out directed at developing a programme theory and achieving consensus on educational programme goals and goal attainability. Results showed how increased professional competence in evaluating goals concerning relationships with PMPID, based on an educational programme theory, accounted for programme success.

The third evaluation study (Vlaskamp et al, 1995) investigated the applicability of educational programmes in one particular residential care programme. The aim of this study was to generalize our educational theory and intervemtion outline to another implementation environment. The main problems in generalization studies centre around the degree of congruency between the two implementation environments. The applicability of our educational programme mainly depends on programme failures. In this particular study, however, care-staff and management persisted in their belief in bio-medicine (such as nursing models or another particular conflicting care system) and disagreed with parents and researchers, who advocated an educational model. In other words, the problem we came up against here was a theory failure among stakeholders. Consensus about the formulation of care for individuals with PMPID in terms of education could not be reached. As a consequence, the proposed intervention programme was not implemented and further research was cancelled. The project ended prematurely.

The lessons learned from these studies have been included in a new research project for the implementation of a transdisciplinairy work model in an institution for day care, including a school, for individuals with PMPID.

In this programme evaluation the relevant issues are:

* to achieve consensus between stakeholders concerning the conceptual theory at the root of the problem, as well as the theory underlying the intervention programme to prevent difficulties created by programme goals in programme operation
* to assess the consistency between the educational programme goals and careworkers' daily activities, such as bio-medical care, physiotherapy, cognitive and motor learning
* to evaluate the congruency between planned and actual programme activities, such as the execution of all programme components and the integrity of their structure
* to evaluate the congruency between planned and actual implementation environment, such as careworkers' professional competence and the organizations' evaluation capacity.

A programme evaluator should illustrate when, why and how a programme may be improved. Remember, an evaluator's task is to evaluate, not to demonstrate whether or not an intervention is effective, nor to simply suggest how programme improvements should be made (Scriven, 1984).

We consider the theory driven approach a useful alternative in this respect.

Literature

Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood, Cliffs, N.J.: Prentice-Hall.

Bickman, L. (1990). *Advances In Program Theory*. San Francisco: Jossey-Bass.

Chen, H.T. (1990). *Theory-driven Evaluations*. Newbury Park: Sage Publications.

Chen, H.T. & Rossi, P.H. (eds.) (1992). *Using theory to improve program and policy evaluations*. New York: Greenwood Press.

Lipsey, M.W. & Pollard, J.A. (1989). Driving toward theory in program evaluation: more models to choose from. *Evaluation and Program Planning, Vol. 12*, 317-328.

Lipsey, M.W. (1990). Theory as method: Small theories of treatments. In: L. Sechrest, E. Perrin & J. Bunker (eds.), *Research methodology: Strengthening causal interpretations of nonexperimental data*. Washinhton D.C: Agency for Health care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.

Guba, E.G. & Lincoln, Y.S. (1989). *Fourth Generation Evaluation*. Newbury Park: Sage Publications.

Gleason, J.J.G. (1989). *Special Education in Context*. Cambridge: Cambridge University Press.

Love, A. (1991). *Internal evaluation*. Newbury Park: Sage Publications.

Meininger, H.P. & Reinders, J.S. (1997). *Educating and caring: A different morality?* Submitted to the European Journal on Mental Disabilities.

Nakken, H. (1993). Perspectives and Goals: Central Issues in Intervention. *Issues in Special Education & Rehabilitation. Vol. 8*, 37-44.

Nakken, H. (1997). *The education of individuals with profound multiple disabilities*. Submitted to The European Journal on Mental Disabilities.

Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park: Sage Publications.

Scriven, M. (1984). Evaluation Ideologies. *Evaluation Studies Review Annual. 9*, 49-81.

Seys, D. M. (1987). *Kwaliteit van zorg, zorg voor kwaliteit, thesis*. Nijmegen: Universiteit van Nijmegen,

Van Andel, H. (1991). *Zorg op Maat*. Vakgroep Algemene Gezondheidszorg en Epidemiologie. Utrecht: Universiteit van Utrecht.

Van Wijck, R. (1993). The Evaluation of Intervention Programs in the Care System for Profoundly Mentally and Physically Handicapped Persons. *Issues in Special Education & Rehabilitation. Vol. 8*, 29-36.

Vlaskamp, C. (1993). Development and Evaluation of Individual Educational Programs for Profoundly Mentally and Physically Handicapped Persons. *Issues in Special Education & Rehabilitation, Vol. 8*, 45-50.

Vlaskamp, C., Uunk, H.E. & Nakken, H. (1995). Het verbeteren van de zorg voor meervoudig gehandicapten. *Eindrapport deelproject 't Heechhout, locatie Beetsterzwaag*. Groningen: Universiteit van Groningen, Department of Educational Sciences.

Vlaskamp, C . (1997). *The implementation of a care programme for individuals with profound multiple disabilities*. Submitted to The European Journal on Mental Disabilities.

Wholey, J.S. (1987). Evaluability Assessment: Developing Program Theory. In: L. Bickman. *Using Program Theory in Evaluation*. San Francisco: Jossey Bass.

Williams, D.D. (eds.) (1986). Naturalistic Evaluation. *New Directions for Program Evaluation, 30*. San Francisco: Jossey Bass.

WVC. (1987). *Eindrapportage van de onafhankelijke begeleidingscommssie van het project Griffioen*. Rijswijk: WVC.

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